## **ABSTRACT**

A method for the extraction of hydrophobic constituents, such as benzene, toluene, xylene and/or chlorinated hydrocarbons, from an aqueous solution, involving the steps of contacting said solution with a porous, preferably dimensionally stable granular or powdery material, of which the pores have a size of from 0.1 to 50  $\mu$ m and contain a hydrophobic substance with affinity for the hydrophobic constituents to be extracted, which granular or powdery material has a particle size of from 0.1 to 10 mm, and is wetted more readily by the hydrophobic substance immobilized in the pores than by the aqueous solution to be treated, and regenerating the product of step a), essentially without the granular or powdery material being freed from the hydrophobic substance, by removal of the hydrophobic constituents.